



THE MATH HUB

themathhub.pk

AGE PROBLEMS MCQs

100 FULLY SOLVED MCQs

PPSC, FPSC & ONE PAPER EXAMS

NTS • CSS MPT • PMS • Government Job Tests

Present • Past • Future • Ratios • Family Ages • Average Age

Prepared by

MEHREEN KANWAL

MPhil Mathematics

RANA ALI HASAN

MPhil Mathematics

The Math Hub - themathhub.pk | 0301-4058484

The Science Academy - Chak No. 84 NB



AGE PROBLEMS | 100 FULLY SOLVED MCQs

Fast Age-Problems Foundation

Present, past and future If present age is x :

$$\text{After } n \text{ years} = x + n$$

$$\text{Before } n \text{ years} = x - n$$

Age difference never changes If two present ages are x and y , then

$$(x + n) - (y + n) = x - y$$

$$(x - n) - (y - n) = x - y$$

Ratio + sum If ages are $a : b$ and total is S :

$$\text{One part} = \frac{S}{a + b}$$

Ratio + difference If ages are $a : b$ and difference is D :

$$\text{One part} = \frac{D}{|a - b|}$$

Average age

$$\text{Total age} = \text{Average} \times \text{Number of persons}$$

If the same people remain, after n years the average also increases by n .

Exam-speed method Translate only the time phrase first: present x , past $x - n$, future $x + n$. Keep the age difference constant. For ratios, use parts instead of guessing actual ages. For family-average questions, convert the average into a total before doing anything else.

Two-person total shift After n years:

$$(x + y) + 2n$$

Before n years:

$$(x + y) - 2n$$

Future-ratio equation For present ages ax, bx :

$$\frac{ax + n}{bx + n} = \frac{p}{q}$$

Cross-multiply immediately.

Past-ratio equation For present ages ax, bx :

$$\frac{ax - n}{bx - n} = \frac{p}{q}$$

Check that every past age remains positive.

Equal birth interval For m children born every d years:

$$x, x + d, x + 2d, \dots, x + (m - 1)d$$

Present, Past & Future Age Basics**MCQ 1**

Ali is 14 years old. His sister is 6 years older. What is her present age?

- A. 18 years B. 20 years
C. 22 years D. 24 years

Solution

$$14 + 6 = 20$$

Final Answer

20 years

MCQ 2

Sara will be 25 years old after 7 years. What is her present age?

- A. 16 years B. 20 years
C. 18 years D. 22 years

Solution

$$x + 7 = 25$$

$$x = 25 - 7 = 18$$

Final Answer

18 years

MCQ 3

Eight years ago, Hamza was 21 years old. What is his present age?

- A. 26 years B. 32 years
C. 35 years D. 29 years

Solution

$$x - 8 = 21$$

$$x = 21 + 8 = 29$$

Final Answer

29 years

MCQ 4

A father is 32 years older than his 14-year-old son. What is the father's age?

- A. 46 years B. 41 years
C. 51 years D. 56 years

Solution

$$14 + 32 = 46$$

Final Answer

46 years

MCQ 5

A person's present age is three times the age he was 10 years ago. Find the present age.

- A. 13 years B. 15 years
C. 17 years D. 19 years

Solution

$$x = 3(x - 10)$$

$$x = 3x - 30$$

$$30 = 2x$$

$$x = 15$$

Final Answer

15 years

MCQ 6

Twelve years from now, a person will be twice as old as he was 6 years ago. Find his present age.

- A. 21 years B. 27 years
C. 24 years D. 30 years

Solution

$$x + 12 = 2(x - 6)$$

$$x + 12 = 2x - 12$$

$$x = 24$$

Final Answer

24 years

MCQ 7

The present ages of two friends add to 58 years. If one is 24 years old, how old is the other?

- A. 31 years B. 37 years
C. 40 years D. 34 years

Solution

$$x + 24 = 58$$

$$x = 58 - 24 = 34$$

Final Answer

34 years

MCQ 8

The difference between the ages of two brothers is 9 years. If the younger is 17, find the elder brother's age.

- A. 26 years B. 23 years
C. 29 years D. 32 years

Solution

$$17 + 9 = 26$$

Final Answer

26 years

MCQ 9

Five years from now, a person's age will be $\frac{4}{3}$ of the present age. Find the present age.

- A. 13 years B. 15 years
C. 17 years D. 19 years

Solution

$$x + 5 = \frac{4}{3}x$$

$$3x + 15 = 4x$$

$$x = 15$$

Final Answer

15 years

MCQ 10

Eight years ago, a person's age was $\frac{3}{5}$ of the present age. Find the present age.

- A. 18 years B. 22 years
C. 20 years D. 24 years

Solution

$$x - 8 = \frac{3}{5}x$$

$$5x - 40 = 3x$$

$$2x = 40$$

$$x = 20$$

Final Answer

20 years

Ratio, Sum & Difference**MCQ 11**

The ages of two persons are in the ratio 3 : 2 and their sum is 50 years. Find the age of the elder person.

- A. 27 years B. 33 years
C. 36 years D. 30 years

Solution

$$3x + 2x = 50$$

$$5x = 50$$

$$x = 10$$

$$\text{Ages} = 3(10), 2(10)$$

Final Answer

30 years

MCQ 12

The ages of two persons are in the ratio 7 : 5 and their difference is 12 years. Find the age of the younger person.

- A. 30 years B. 27 years
C. 33 years D. 36 years

Solution

$$7x - 5x = 12$$

$$2x = 12$$

$$x = 6$$

$$\text{Ages} = 7(6), 5(6)$$

Final Answer

30 years

MCQ 13

The ages of two persons are in the ratio 5 : 3 and their sum is 64 years. Find the age of the elder person.

- A. 35 years B. 40 years
C. 45 years D. 50 years

Solution

$$5x + 3x = 64$$

$$8x = 64$$

$$x = 8$$

$$\text{Ages} = 5(8), 3(8)$$

Final Answer

40 years

MCQ 14

The ages of two persons are in the ratio 9 : 4 and their difference is 25 years. Find the age of the younger person.

- A. 18 years B. 22 years
C. 20 years D. 24 years

Solution

$$9x - 4x = 25$$

$$5x = 25$$

$$x = 5$$

$$\text{Ages} = 9(5), 4(5)$$

Final Answer

20 years

MCQ 15

The ages of two persons are in the ratio 4 : 3 and their sum is 49 years. Find the age of the elder person.

- A. 25 years B. 31 years
C. 34 years D. 28 years

Solution

$$4x + 3x = 49$$

$$7x = 49$$

$$x = 7$$

$$\text{Ages} = 4(7), 3(7)$$

Final Answer

28 years

MCQ 16

The ages of two persons are in the ratio 11 : 7 and their difference is 16 years. Find the age of the younger person.

- A. 28 years B. 25 years
C. 31 years D. 34 years

Solution

$$11x - 7x = 16$$

$$4x = 16$$

$$x = 4$$

$$\text{Ages} = 11(4), 7(4)$$

Final Answer

28 years

MCQ 17

The ages of two persons are in the ratio 7 : 3 and their sum is 60 years. Find the difference between their ages.

- A. 21 years B. 24 years
C. 27 years D. 30 years

Reported PPSC/one-paper age pattern (adapted).

Solution

$$7x + 3x = 60$$

$$10x = 60$$

$$x = 6$$

$$\text{Ages} = 7(6), 3(6)$$

Final Answer

24 years

MCQ 18

The ages of two persons are in the ratio 5 : 2 and their difference is 27 years. Find the age of the elder person.

- A. 40 years B. 50 years
C. 45 years D. 55 years

Solution

$$5x - 2x = 27$$

$$3x = 27$$

$$x = 9$$

$$\text{Ages} = 5(9), 2(9)$$

Final Answer

45 years

MCQ 19

The ages of two persons are in the ratio 6 : 5 and their sum is 66 years. Find the age of the younger person.

- A. 27 years B. 33 years
C. 36 years D. 30 years

Solution

$$6x + 5x = 66$$

$$11x = 66$$

$$x = 6$$

$$\text{Ages} = 6(6), 5(6)$$

Final Answer

30 years

MCQ 20

The ages of two persons are in the ratio 8 : 7 and their difference is 4 years. Find the age of the elder person.

- A. 32 years B. 29 years
C. 35 years D. 38 years

Solution

$$8x - 7x = 4$$

$$1x = 4$$

$$x = 4$$

$$\text{Ages} = 8(4), 7(4)$$

Final Answer

32 years

Present Ratio with Future/Past Ratio**MCQ 21**

The present age ratio of a father to his son is 5 : 2. 6 years from now, their age ratio is 2 : 1. Find the present age of the son.

- A. 10 years B. 12 years
C. 14 years D. 16 years

Solution

$$F : S = 5 : 2$$

$$F = 5x, \quad S = 2x$$

$$\frac{5x + 6}{2x + 6} = \frac{2}{1}$$

$$1(5x + 6) = 2(2x + 6)$$

$$5x + 6 = 4x + 12$$

$$1x = 6$$

$$x = 6$$

$$F = 5(6) = 30, \quad S = 2(6) = 12$$

Final Answer

12 years

MCQ 22

The present age ratio of a father to his son is 2 : 1. 8 years from now, their age ratio is 5 : 3. Find the present age of the father.

- A. 29 years B. 35 years
C. 32 years D. 38 years

Solution

$$F : S = 2 : 1$$

$$F = 2x, \quad S = 1x$$

$$\frac{2x + 8}{1x + 8} = \frac{5}{3}$$

$$3(2x + 8) = 5(1x + 8)$$

$$6x + 24 = 5x + 40$$

$$1x = 16$$

$$x = 16$$

$$F = 2(16) = 32, \quad S = 1(16) = 16$$

Final Answer

32 years

MCQ 23

The present age ratio of a father to his son is 5 : 3. 7 years from now, their age ratio is 3 : 2. Find the present age of the son.

- A. 18 years B. 24 years
C. 27 years D. 21 years

Solution

$$F : S = 5 : 3$$

$$F = 5x, \quad S = 3x$$

$$\frac{5x + 7}{3x + 7} = \frac{3}{2}$$

$$2(5x + 7) = 3(3x + 7)$$

$$10x + 14 = 9x + 21$$

$$1x = 7$$

$$x = 7$$

$$F = 5(7) = 35, \quad S = 3(7) = 21$$

Final Answer

21 years

MCQ 24

The present age ratio of a father to his son is 5 : 2. 8 years from now, their age ratio is 2 : 1. Find the present age of the father.

- A. 40 years B. 35 years
C. 45 years D. 50 years

Solution

$$F : S = 5 : 2$$

$$F = 5x, \quad S = 2x$$

$$\frac{5x + 8}{2x + 8} = \frac{2}{1}$$

$$1(5x + 8) = 2(2x + 8)$$

$$5x + 8 = 4x + 16$$

$$1x = 8$$

$$x = 8$$

$$F = 5(8) = 40, \quad S = 2(8) = 16$$

Final Answer

40 years

MCQ 25

The present age ratio of a father to his son is 7 : 3. 6 years from now, their age ratio is 2 : 1. Find the present age of the son.

- A. 16 years B. 18 years
C. 20 years D. 22 years

Solution

$$F : S = 7 : 3$$

$$F = 7x, \quad S = 3x$$

$$\frac{7x + 6}{3x + 6} = \frac{2}{1}$$

$$1(7x + 6) = 2(3x + 6)$$

$$7x + 6 = 6x + 12$$

$$1x = 6$$

$$x = 6$$

$$F = 7(6) = 42, \quad S = 3(6) = 18$$

Final Answer

18 years

MCQ 26

The present age ratio of a father to his son is 3 : 1. 15 years from now, their age ratio is 2 : 1. Find the present age of the father.

- A. 40 years B. 50 years
C. 45 years D. 55 years

Solution

$$F : S = 3 : 1$$

$$F = 3x, \quad S = 1x$$

$$\frac{3x + 15}{1x + 15} = \frac{2}{1}$$

$$1(3x + 15) = 2(1x + 15)$$

$$3x + 15 = 2x + 30$$

$$1x = 15$$

$$x = 15$$

$$F = 3(15) = 45, \quad S = 1(15) = 15$$

Final Answer

45 years

MCQ 27

The present age ratio of a father to his son is 2 : 1. 12 years from now, their age ratio is 5 : 3. Find the present age of the son.

- A. 21 years B. 27 years
C. 30 years D. 24 years

Solution

$$F : S = 2 : 1$$

$$F = 2x, \quad S = 1x$$

$$\frac{2x + 12}{1x + 12} = \frac{5}{3}$$

$$3(2x + 12) = 5(1x + 12)$$

$$6x + 36 = 5x + 60$$

$$1x = 24$$

$$x = 24$$

$$F = 2(24) = 48, \quad S = 1(24) = 24$$

Final Answer

24 years

MCQ 28

The present age ratio of a father to his son is 5 : 3. 10 years from now, their age ratio is 3 : 2. Find the present age of the father.

- A. 50 years B. 45 years
C. 55 years D. 60 years

Solution

$$F : S = 5 : 3$$

$$F = 5x, \quad S = 3x$$

$$\frac{5x + 10}{3x + 10} = \frac{3}{2}$$

$$2(5x + 10) = 3(3x + 10)$$

$$10x + 20 = 9x + 30$$

$$1x = 10$$

$$x = 10$$

$$F = 5(10) = 50, \quad S = 3(10) = 30$$

Final Answer

50 years

MCQ 29

The present age ratio of a father to his son is 3 : 1. 18 years from now, their age ratio is 2 : 1. Find the present age of the son.

- A. 16 years B. 18 years
C. 20 years D. 22 years

Solution

$$F : S = 3 : 1$$

$$F = 3x, \quad S = 1x$$

$$\frac{3x + 18}{1x + 18} = \frac{2}{1}$$

$$1(3x + 18) = 2(1x + 18)$$

$$3x + 18 = 2x + 36$$

$$1x = 18$$

$$x = 18$$

$$F = 3(18) = 54, \quad S = 1(18) = 18$$

Final Answer

18 years

MCQ 30

The present age ratio of a father to his son is 7 : 4. 8 years from now, their age ratio is 8 : 5. Find the present age of the father.

- A. 51 years B. 61 years
C. 56 years D. 66 years

Solution

$$F : S = 7 : 4$$

$$F = 7x, \quad S = 4x$$

$$\frac{7x + 8}{4x + 8} = \frac{8}{5}$$

$$5(7x + 8) = 8(4x + 8)$$

$$35x + 40 = 32x + 64$$

$$3x = 24$$

$$x = 8$$

$$F = 7(8) = 56, \quad S = 4(8) = 32$$

Final Answer

56 years

MCQ 31

The present age ratio of a father to his son is 3 : 1. 5 years ago, their age ratio is 5 : 1. Find the present age of the son.

- A. 8 years B. 12 years
C. 14 years D. 10 years

Solution

$$F : S = 3 : 1$$

$$F = 3x, \quad S = 1x$$

$$\frac{3x - 5}{1x - 5} = \frac{5}{1}$$

$$1(3x - 5) = 5(1x - 5)$$

$$3x - 5 = 5x - 25$$

$$-2x = -20$$

$$x = 10$$

$$F = 3(10) = 30, \quad S = 1(10) = 10$$

Final Answer

10 years

MCQ 32

The present age ratio of a father to his son is 2 : 1. 5 years ago, their age ratio is 5 : 2. Find the present age of the father.

- A. 30 years B. 27 years
C. 33 years D. 36 years

Solution

$$F : S = 2 : 1$$

$$F = 2x, \quad S = 1x$$

$$\frac{2x-5}{1x-5} = \frac{5}{2}$$

$$2(2x-5) = 5(1x-5)$$

$$4x-10 = 5x-25$$

$$-1x = -15$$

$$x = 15$$

$$F = 2(15) = 30, \quad S = 1(15) = 15$$

Final Answer

30 years

MCQ 33

The present age ratio of a father to his son is 7 : 4. 5 years ago, their age ratio is 2 : 1. Find the present age of the son.

- A. 18 years B. 20 years
C. 22 years D. 24 years

Solution

$$F : S = 7 : 4$$

$$F = 7x, \quad S = 4x$$

$$\frac{7x-5}{4x-5} = \frac{2}{1}$$

$$1(7x-5) = 2(4x-5)$$

$$7x-5 = 8x-10$$

$$-1x = -5$$

$$x = 5$$

$$F = 7(5) = 35, \quad S = 4(5) = 20$$

Final Answer

20 years

MCQ 34

The present age ratio of a father to his son is 3 : 1. 6 years ago, their age ratio is 5 : 1. Find the present age of the father.

- A. 31 years B. 41 years
C. 36 years D. 46 years

Solution

$$F : S = 3 : 1$$

$$F = 3x, \quad S = 1x$$

$$\frac{3x-6}{1x-6} = \frac{5}{1}$$

$$1(3x-6) = 5(1x-6)$$

$$3x-6 = 5x-30$$

$$-2x = -24$$

$$x = 12$$

$$F = 3(12) = 36, \quad S = 1(12) = 12$$

Final Answer

36 years

MCQ 35

The present age ratio of a father to his son is 2 : 1. 10 years ago, their age ratio is 3 : 1. Find the present age of the son.

- A. 18 years B. 22 years
C. 24 years D. 20 years

Solution

$$F : S = 2 : 1$$

$$F = 2x, \quad S = 1x$$

$$\frac{2x-10}{1x-10} = \frac{3}{1}$$

$$1(2x-10) = 3(1x-10)$$

$$2x-10 = 3x-30$$

$$-1x = -20$$

$$x = 20$$

$$F = 2(20) = 40, \quad S = 1(20) = 20$$

Final Answer

20 years

MCQ 36

The present age ratio of a father to his son is 2 : 1. 7 years ago, their age ratio is 5 : 2. Find the present age of the father.

- A. 42 years B. 37 years
C. 47 years D. 52 years

Solution

$$F : S = 2 : 1$$

$$F = 2x, \quad S = 1x$$

$$\frac{2x-7}{1x-7} = \frac{5}{2}$$

$$2(2x-7) = 5(1x-7)$$

$$4x-14 = 5x-35$$

$$-1x = -21$$

$$x = 21$$

$$F = 2(21) = 42, \quad S = 1(21) = 21$$

Final Answer

42 years

MCQ 37

The present age ratio of a father to his son is 9 : 5. 5 years ago, their age ratio is 2 : 1. Find the present age of the son.

- A. 22 years B. 25 years
C. 28 years D. 31 years

Solution

$$F : S = 9 : 5$$

$$F = 9x, \quad S = 5x$$

$$\frac{9x-5}{5x-5} = \frac{2}{1}$$

$$1(9x-5) = 2(5x-5)$$

$$9x-5 = 10x-10$$

$$-1x = -5$$

$$x = 5$$

$$F = 9(5) = 45, \quad S = 5(5) = 25$$

Final Answer

25 years

MCQ 38

The present age ratio of a father to his son is 2 : 1. 8 years ago, their age ratio is 5 : 2. Find the present age of the father.

- A. 43 years B. 53 years
C. 48 years D. 58 years

Solution

$$F : S = 2 : 1$$

$$F = 2x, \quad S = 1x$$

$$\frac{2x-8}{1x-8} = \frac{5}{2}$$

$$2(2x-8) = 5(1x-8)$$

$$4x-16 = 5x-40$$

$$-1x = -24$$

$$x = 24$$

$$F = 2(24) = 48, \quad S = 1(24) = 24$$

Final Answer

48 years

MCQ 39

The present age ratio of a father to his son is 5 : 2. 10 years ago, their age ratio is 4 : 1. Find the present age of the son.

- A. 18 years B. 22 years
C. 24 years D. 20 years

Solution

$$F : S = 5 : 2$$

$$F = 5x, \quad S = 2x$$

$$\frac{5x-10}{2x-10} = \frac{4}{1}$$

$$1(5x-10) = 4(2x-10)$$

$$5x-10 = 8x-40$$

$$-3x = -30$$

$$x = 10$$

$$F = 5(10) = 50, \quad S = 2(10) = 20$$

Final Answer

20 years

MCQ 40

The present age ratio of a father to his son is 2 : 1. 10 years ago, their age ratio is 5 : 2. Find the present age of the father.

- A. 60 years B. 55 years
C. 65 years D. 70 years

Solution

$$F : S = 2 : 1$$

$$F = 2x, \quad S = 1x$$

$$\frac{2x - 10}{1x - 10} = \frac{5}{2}$$

$$2(2x - 10) = 5(1x - 10)$$

$$4x - 20 = 5x - 50$$

$$-1x = -30$$

$$x = 30$$

$$F = 2(30) = 60, \quad S = 1(30) = 30$$

Final Answer

60 years

Father-Son & Family Age Equations**MCQ 41**

A father is three times as old as his son. After 15 years, the father will be twice as old as the son. Find the father's present age.

- A. 40 years B. 45 years
C. 50 years D. 55 years

Reported one-paper age pattern (adapted).

Solution

$$F = 3S$$

$$F + 15 = 2(S + 15)$$

$$3S + 15 = 2S + 30$$

$$S = 15$$

$$F = 3(15) = 45$$

Final Answer

45 years

MCQ 42

Tanveer is 10 years older than Ali. Five years ago, Tanveer was twice as old as Ali. Find Ali's present age.

- A. 13 years B. 17 years
C. 15 years D. 19 years

Reported PPSC/FPSC preparation pattern (adapted).

Solution

$$T = A + 10$$

$$T - 5 = 2(A - 5)$$

$$A + 10 - 5 = 2A - 10$$

$$A + 5 = 2A - 10$$

$$A = 15$$

Final Answer

15 years

MCQ 43

Aslam is now three times as old as Javed. Five years ago, Aslam was five times as old as Javed. Find Aslam's present age.

- A. 27 years B. 33 years
C. 36 years D. 30 years

Reported PPSC/FPSC preparation pattern (adapted).

Solution

$$A = 3J$$

$$A - 5 = 5(J - 5)$$

$$3J - 5 = 5J - 25$$

$$20 = 2J$$

$$J = 10$$

$$A = 30$$

Final Answer

30 years

MCQ 44

The sum of the present ages of a father and son is 82 years. After 4 years, the father will be twice as old as the son. Find the father's present age.

- A. 56 years B. 51 years
C. 61 years D. 66 years

Solution

$$F + S = 82$$

$$F + 4 = 2(S + 4)$$

$$F = 2S + 4$$

$$2S + 4 + S = 82$$

$$3S = 78$$

$$S = 26$$

$$F = 56$$

Final Answer

56 years

MCQ 45

A father is 54 years old. Four years ago, he was five times as old as his son. How old will the son be after 5 years?

- A. 17 years B. 19 years
C. 21 years D. 23 years

Reported age-problem pattern (adapted).

Solution

$$54 - 4 = 5(S - 4)$$

$$50 = 5(S - 4)$$

$$10 = S - 4$$

$$S = 14$$

$$S + 5 = 19$$

Final Answer

19 years

MCQ 46

A man is 45 years old. Five years ago, he was five times as old as his son. Find the son's present age.

- A. 11 years B. 15 years
C. 13 years D. 17 years

Reported age-problem pattern (adapted).

Solution

$$45 - 5 = 5(S - 5)$$

$$40 = 5(S - 5)$$

$$8 = S - 5$$

$$S = 13$$

Final Answer

13 years

MCQ 47

A father is four times as old as his son and the sum of their ages is 50 years. Find the father's age.

- A. 35 years B. 45 years
C. 50 years D. 40 years

Reported one-paper age pattern (adapted).

Solution

$$F = 4S$$

$$F + S = 50$$

$$4S + S = 50$$

$$5S = 50$$

$$S = 10$$

$$F = 40$$

Final Answer

40 years

MCQ 48

Sohail is four times as old as his son. Four years from now, the sum of their ages will be 43 years. Find the son's present age.

- A. 7 years B. 5 years
C. 9 years D. 11 years

Reported one-paper age pattern (adapted).

Solution

$$F = 4S$$

$$(F + 4) + (S + 4) = 43$$

$$4S + S + 8 = 43$$

$$5S = 35$$

$$S = 7$$

Final Answer

7 years

MCQ 49

Ahmad is 12 years old and his father is 40 years old. After how many years will the father be twice as old as Ahmad?

- A. 14 years B. 16 years
C. 18 years D. 20 years

Reported one-paper age pattern (adapted).

Solution

$$40 + x = 2(12 + x)$$

$$40 + x = 24 + 2x$$

$$x = 16$$

Final Answer

16 years

MCQ 50

A is 3 years older than B. Seven years from now, the sum of their ages will be 79. Find B's present age.

- A. 28 years B. 34 years
C. 31 years D. 37 years

Reported one-paper age pattern (adapted).

Solution

$$A = B + 3$$

$$(A + 7) + (B + 7) = 79$$

$$B + 3 + B + 14 = 79$$

$$2B = 62$$

$$B = 31$$

Final Answer

31 years

MCQ 51

A son's present age is one-third of his father's present age. Five years ago, the son was 7 years old. Find the father's present age.

- A. 31 years B. 41 years
C. 46 years D. 36 years

Reported one-paper age pattern (adapted).

Solution

$$S - 5 = 7$$

$$S = 12$$

$$S = \frac{1}{3}F$$

$$F = 3S = 3(12) = 36$$

Final Answer

36 years

MCQ 52

Ten years ago, the average age of a father and son was 27.5 years. Their present ages are in the ratio 4 : 1. Find the son's present age.

- A. 15 years B. 13 years
C. 17 years D. 19 years

Adapted from a common age-ratio pattern.

Solution

$$\text{Past total} = 2(27.5) = 55$$

$$\text{Present total} = 55 + 2(10) = 75$$

$$F : S = 4 : 1$$

$$4x + x = 75$$

$$5x = 75$$

$$x = 15$$

$$S = 15$$

Final Answer

15 years

MCQ 53

A father is twice as old as his son. Twenty years ago, the father was twelve times as old as the son. Find the father's present age.

- A. 39 years B. 44 years
C. 49 years D. 54 years

Reported one-paper age pattern (adapted).

Solution

$$F = 2S$$

$$F - 20 = 12(S - 20)$$

$$2S - 20 = 12S - 240$$

$$220 = 10S$$

$$S = 22$$

$$F = 44$$

Final Answer

44 years

MCQ 54

A person's present age is $\frac{2}{5}$ of his mother's present age. After 8 years, his age will be one-half of his mother's age. Find the mother's present age.

- A. 35 years B. 45 years
C. 40 years D. 50 years

Reported one-paper age pattern (adapted).

Solution

$$P = \frac{2}{5}M$$

$$P + 8 = \frac{1}{2}(M + 8)$$

$$2P + 16 = M + 8$$

$$2P + 8 = M$$

$$2\left(\frac{2}{5}M\right) + 8 = M$$

$$\frac{4}{5}M + 8 = M$$

$$8 = \frac{1}{5}M$$

$$M = 40$$

Final Answer

40 years

MCQ 55

A's mother is twice as old as A's brother. A is 6 years younger than his brother and 4 years older than his sister. If A's sister is 15, find the mother's age.

- A. 45 years B. 55 years
C. 60 years D. 50 years

Reported one-paper age pattern (adapted).

Solution

$$\text{Sister} = 15$$

$$A = 15 + 4 = 19$$

$$\text{Brother} = 19 + 6 = 25$$

$$\text{Mother} = 2(25) = 50$$

Final Answer

50 years

Siblings & Multiple-Person Age Problems

MCQ 56

Five children are born at intervals of 3 years. The sum of their ages is 50 years. Find the age of the youngest child.

- A. 4 years B. 2 years
C. 6 years D. 8 years

Common competitive-exam age pattern (adapted).

Solution

$$x + (x + 3) + (x + 6) + (x + 9) + (x + 12) = 50$$

$$5x + 30 = 50$$

$$5x = 20$$

$$x = 4$$

Final Answer

4 years

MCQ 57

Four siblings have consecutive even ages and their ages add to 52 years. Find the oldest age.

- A. 14 years B. 16 years
C. 18 years D. 20 years

Solution

$$x + (x + 2) + (x + 4) + (x + 6) = 52$$

$$4x + 12 = 52$$

$$4x = 40$$

$$x = 10$$

$$\text{Oldest} = x + 6 = 16$$

Final Answer

16 years

MCQ 58

The ages of three siblings are in the ratio 2 : 3 : 5 and their sum is 50 years. Find the middle sibling's age.

- A. 13 years B. 17 years
C. 15 years D. 19 years

Solution

$$2x + 3x + 5x = 50$$

$$10x = 50$$

$$x = 5$$

$$\text{Middle} = 3x = 15$$

Final Answer

15 years

MCQ 59

A is 2 years older than B, and B is twice as old as C. If the sum of their ages is 27, find B's age.

- A. 8 years B. 12 years
C. 14 years D. 10 years

Common age-problem pattern (adapted).

Solution

$$B = 2C$$

$$A = B + 2 = 2C + 2$$

$$(2C + 2) + 2C + C = 27$$

$$5C + 2 = 27$$

$$5C = 25$$

$$C = 5$$

$$B = 10$$

Final Answer

10 years

MCQ 60

The ages of three friends are in the ratio 4 : 5 : 6. Their total age is 75 years. Find the youngest friend's age.

- A. 20 years B. 18 years
C. 22 years D. 24 years

Solution

$$4x + 5x + 6x = 75$$

$$15x = 75$$

$$x = 5$$

$$\text{Youngest} = 4x = 20$$

Final Answer

20 years

MCQ 61

The sum of the ages of two children is 12 years and the product of their ages is 32. Find the elder child's age.

- A. 6 years B. 8 years
C. 10 years D. 12 years

Reported one-paper age pattern (adapted).

Solution

$$x + y = 12, \quad xy = 32$$

$$t^2 - 12t + 32 = 0$$

$$(t - 4)(t - 8) = 0$$

$$t = 4, 8$$

$$\text{Elder} = 8$$

Final Answer

8 years

MCQ 62

The difference between the ages of two brothers is 2 years. The difference of the squares of their ages is 20. Find the younger brother's age.

- A. 2 years B. 6 years
C. 4 years D. 8 years

Reported one-paper age pattern (adapted).

Solution

$$E - Y = 2$$

$$E^2 - Y^2 = 20$$

$$(E - Y)(E + Y) = 20$$

$$2(E + Y) = 20$$

$$E + Y = 10$$

$$E - Y = 2$$

$$2E = 12 \Rightarrow E = 6$$

$$Y = 4$$

Final Answer

4 years

MCQ 63

Ahmad is as much younger than Saeed as he is older than Tanveer. If the sum of Saeed's and Tanveer's ages is 48, find Ahmad's age.

- A. 21 years B. 27 years
C. 30 years D. 24 years

Reported PPSC-style age pattern (adapted).

Solution

$$S - A = A - T$$

$$S + T = 2A$$

$$48 = 2A$$

$$A = 24$$

Final Answer

24 years

MCQ 64

An elder sister is 5 years older than her younger sister. Four years ago, the elder sister was twice the younger sister's age. Find the elder sister's present age.

- A. 14 years B. 12 years
C. 16 years D. 18 years

Solution

$$E = Y + 5$$

$$E - 4 = 2(Y - 4)$$

$$Y + 1 = 2Y - 8$$

$$Y = 9$$

$$E = 14$$

Final Answer

14 years

MCQ 65

The ages of a grandfather, father and son are in the ratio 8 : 5 : 2. Their total age is 105 years. Find the father's age.

- A. 32 years B. 35 years
C. 38 years D. 41 years

Solution

$$8x + 5x + 2x = 105$$

$$15x = 105$$

$$x = 7$$

$$\text{Father} = 5x = 35$$

Final Answer

35 years

Average Age Problems**MCQ 66**

The average age of 5 members of a family is 24 years. A newborn baby is added to the family. What is the new average age immediately after the birth?

- A. 18 years B. 22 years
C. 20 years D. 24 years

Solution

$$\text{Old total} = 5(24) = 120$$

$$\text{New total} = 120 + 0 = 120$$

$$\text{New average} = \frac{120}{6} = 20$$

Final Answer

20 years

MCQ 67

The average age of 4 persons is 30 years. A 40-year-old person leaves and another person joins. If the new average is 28 years, find the new person's age.

- A. 29 years B. 35 years
C. 38 years D. 32 years

Solution

$$\text{Old total} = 4(30) = 120$$

$$\text{Total after leaving} = 120 - 40 = 80$$

$$\text{New total} = 4(28) = 112$$

$$\text{New age} = 112 - 80 = 32$$

Final Answer

32 years

MCQ 68

The average age of 6 students is 15 years. A teacher joins them and the average becomes 18 years. Find the teacher's age.

- A. 36 years B. 31 years
C. 41 years D. 46 years

Solution

$$\text{Student total} = 6(15) = 90$$

$$\text{New total} = 7(18) = 126$$

$$\text{Teacher} = 126 - 90 = 36$$

Final Answer

36 years

MCQ 69

The average age of a husband and wife is 28 years. Their child is 4 years old. Find the average age of the three family members.

- A. 18 years B. 20 years
C. 22 years D. 24 years

Solution

$$\text{Husband+wife} = 2(28) = 56$$

$$\text{Family total} = 56 + 4 = 60$$

$$\text{Average} = \frac{60}{3} = 20$$

Final Answer

20 years

MCQ 70

The average age of 8 persons is 22 years. A 34-year-old person is replaced by a 26-year-old person. Find the new average age.

- A. 18 years B. 24 years
C. 21 years D. 27 years

Solution

$$\text{Old total} = 8(22) = 176$$

$$\text{New total} = 176 - 34 + 26 = 168$$

$$\text{New average} = \frac{168}{8} = 21$$

Final Answer

21 years

MCQ 71

The average age of 5 children is 12 years. What will their average age be after 3 years?

- A. 13 years B. 17 years
C. 19 years D. 15 years

Solution

Each age increases by 3

Average also increases by 3

$$12 + 3 = 15$$

Final Answer

15 years

MCQ 72

The average age of a father and son is 30 years. The father is three times as old as the son. Find the father's age.

- A. 45 years B. 40 years
C. 50 years D. 55 years

Solution

$$F + S = 2(30) = 60$$

$$F = 3S$$

$$3S + S = 60$$

$$4S = 60$$

$$S = 15$$

$$F = 45$$

Final Answer

45 years

MCQ 73

The average age of a mother and daughter is 27 years and the difference of their ages is 18 years. Find the mother's age.

- A. 31 years B. 36 years
C. 41 years D. 46 years

Solution

$$M + D = 2(27) = 54$$

$$M - D = 18$$

$$2M = 72$$

$$M = 36$$

Final Answer

36 years

MCQ 74

The average age of three siblings is 18 years. The youngest is 12 and the oldest is 24. Find the middle sibling's age.

- A. 16 years B. 20 years
C. 18 years D. 22 years

Solution

$$\text{Total} = 3(18) = 54$$

$$\text{Middle} = 54 - 12 - 24 = 18$$

Final Answer

18 years

MCQ 75

The average age of 10 students is 14 years. Two students aged 16 and 18 join the group. Find the new average age.

- A. 13.5 years B. 14.5 years
C. 15.5 years D. 16.5 years

Solution

$$\text{Old total} = 10(14) = 140$$

$$\text{New total} = 140 + 16 + 18 = 174$$

$$\text{New count} = 12$$

$$\text{New average} = \frac{174}{12} = 14.5$$

Final Answer

14.5 years

Intervals & Consecutive Ages**MCQ 76**

Five children are born at intervals of 2 years. Their total age is 60 years. Find the youngest child's age.

- A. 8 years B. 6 years
C. 10 years D. 12 years

Solution

$$x + (x + 2) + (x + 4) + (x + 6) + (x + 8) = 60$$

$$5x + 20 = 60$$

$$5x = 40$$

$$x = 8$$

Final Answer

8 years

MCQ 77

Four children are born at intervals of 3 years. If the oldest is 20 years old, find the youngest age.

- A. 9 years B. 11 years
C. 13 years D. 15 years

Solution

$$\text{Age gap from youngest to oldest} = 3(3) = 9$$

$$\text{Youngest} = 20 - 9 = 11$$

Final Answer

11 years

MCQ 78

Three children have consecutive ages and their total age is 45 years. Find the youngest age.

- A. 12 years B. 16 years
C. 14 years D. 18 years

Solution

$$x + (x + 1) + (x + 2) = 45$$

$$3x + 3 = 45$$

$$3x = 42$$

$$x = 14$$

Final Answer

14 years

MCQ 79

Four persons have consecutive ages and their sum is 70 years. Find the oldest age.

- A. 17 years B. 21 years
C. 23 years D. 19 years

Solution

$$x + (x + 1) + (x + 2) + (x + 3) = 70$$

$$4x + 6 = 70$$

$$4x = 64$$

$$x = 16$$

$$\text{Oldest} = 19$$

Final Answer

19 years

MCQ 80

Three siblings have consecutive odd ages and their sum is 51 years. Find the oldest age.

- A. 19 years B. 17 years
C. 21 years D. 23 years

Solution

$$x + (x + 2) + (x + 4) = 51$$

$$3x + 6 = 51$$

$$3x = 45$$

$$x = 15$$

$$\text{Oldest} = 19$$

Final Answer

19 years

MCQ 81

Three friends have consecutive even ages and their sum is 42 years. Find the youngest age.

- A. 10 years B. 12 years
C. 14 years D. 16 years

Solution

$$x + (x + 2) + (x + 4) = 42$$

$$3x + 6 = 42$$

$$3x = 36$$

$$x = 12$$

Final Answer

12 years

MCQ 82

Three children have ages in arithmetic progression with common difference 4 years. Their total age is 60 years. Find the youngest age.

- A. 14 years B. 18 years
C. 16 years D. 20 years

Solution

$$x + (x + 4) + (x + 8) = 60$$

$$3x + 12 = 60$$

$$3x = 48$$

$$x = 16$$

Final Answer

16 years

MCQ 83

Six children are born at intervals of 2 years. Their total age is 66 years. Find the youngest child's age.

- A. 4 years B. 8 years
C. 10 years D. 6 years

Solution

$$x + (x + 2) + (x + 4) + (x + 6) + (x + 8) + (x + 10) = 66$$

$$6x + 30 = 66$$

$$6x = 36$$

$$x = 6$$

Final Answer

6 years

MCQ 84

Twins have the same age. Their elder sibling is 4 years older than each twin. If the sum of the three ages is 40, find the age of each twin.

- A. 12 years B. 10 years
C. 14 years D. 16 years

Solution

$$x + x + (x + 4) = 40$$

$$3x + 4 = 40$$

$$3x = 36$$

$$x = 12$$

Final Answer

12 years

MCQ 85

A mother is 42 years old and her child is 18 years old. How old was the mother when the child was born?

- A. 21 years B. 24 years
C. 27 years D. 30 years

Solution

$$\text{Age difference} = 42 - 18 = 24$$

$$\text{At child's birth, child age} = 0$$

$$\text{Mother's age} = 24$$

Final Answer

24 years

Algebraic & Special Age Patterns**MCQ 86**

Twenty years ago, a person's age was one-third of the present age. Find the present age.

- A. 27 years B. 33 years
C. 30 years D. 36 years

Common competitive age pattern (adapted).

Solution

$$x - 20 = \frac{1}{3}x$$

$$3x - 60 = x$$

$$2x = 60$$

$$x = 30$$

Final Answer

30 years

MCQ 87

Seven years from now, Asim will be twice as old as he was 8 years ago. Find Asim's present age.

- A. 20 years B. 26 years
C. 29 years D. 23 years

Reported one-paper age pattern (adapted).

Solution

$$x + 7 = 2(x - 8)$$

$$x + 7 = 2x - 16$$

$$x = 23$$

Final Answer

23 years

MCQ 88

If 12 years are added to two-thirds of Rani's present age, the result is 3 years more than her present age. Find Rani's age.

- A. 27 years B. 24 years
C. 30 years D. 33 years

Reported one-paper age pattern (adapted).

Solution

$$\frac{2}{3}x + 12 = x + 3$$

$$12 - 3 = x - \frac{2}{3}x$$

$$9 = \frac{1}{3}x$$

$$x = 27$$

Final Answer

27 years

MCQ 89

Laila is four times as old as her 2-year-old brother. How old will the brother be when he becomes half as old as Laila?

- A. 4 years B. 6 years
C. 8 years D. 10 years

Reported one-paper age pattern (adapted).

Solution

$$L = 4(2) = 8$$

$$2 + t = \frac{1}{2}(8 + t)$$

$$4 + 2t = 8 + t$$

$$t = 4$$

$$\text{Brother's age} = 2 + 4 = 6$$

Final Answer

6 years

MCQ 90

Five years ago, a person's age was four-fifths of the age he will be five years from now. Find the present age.

- A. 40 years B. 50 years
C. 45 years D. 55 years

Solution

$$x - 5 = \frac{4}{5}(x + 5)$$

$$5x - 25 = 4x + 20$$

$$x = 45$$

Final Answer

45 years

MCQ 91

The sum of the ages of a father and son is 100 years. Five years ago, their ages were in the ratio 2 : 1. What will be their age ratio after 10 years?

- A. 7:5 B. 5:3
C. 4:3 D. 3:2

Reported PPSC-style age pattern (adapted).

Solution

$$F + S = 100$$

$$\frac{F - 5}{S - 5} = \frac{2}{1}$$

$$F - 5 = 2S - 10$$

$$F = 2S - 5$$

$$2S - 5 + S = 100$$

$$3S = 105$$

$$S = 35, \quad F = 65$$

$$\text{After 10 years: } 75 : 45$$

$$75 : 45 = 5 : 3$$

Final Answer

5 : 3

MCQ 92

A father says to his son: "At the time of your birth, I was as old as you are now." If the father is 38 years old now, how old was the son 5 years ago?

- A. 14 years B. 12 years
C. 16 years D. 18 years

Common age-problem pattern (adapted).

Solution

$$\text{Son's present age} = S$$

$$\text{Father's age at son's birth} = 38 - S$$

$$38 - S = S$$

$$2S = 38$$

$$S = 19$$

$$19 - 5 = 14$$

Final Answer

14 years

MCQ 93

A father is 30 years older than his son. After 5 years, the father will be three times as old as the son. Find the father's present age.

- A. 35 years B. 40 years
C. 45 years D. 50 years

Common age-problem pattern (adapted).

Solution

$$F = S + 30$$

$$F + 5 = 3(S + 5)$$

$$S + 35 = 3S + 15$$

$$20 = 2S$$

$$S = 10$$

$$F = 40$$

Final Answer

40 years

MCQ 94

A mother and daughter are presently in the age ratio 8 : 3, and their age difference is 35 years. What will their ratio be after 4 years?

- A. 8:3 B. 13:6
C. 12:5 D. 5:2

Common quantitative-aptitude age pattern (adapted).

Solution

$$M : D = 8 : 3$$

$$8x - 3x = 35$$

$$5x = 35$$

$$x = 7$$

$$M = 56, \quad D = 21$$

After 4 years: 60 : 25

$$60 : 25 = 12 : 5$$

Final Answer

12 : 5

MCQ 95

B is 6 years older than A. Four years ago, B was twice as old as A. Find B's present age.

- A. 14 years B. 18 years
C. 20 years D. 16 years

Solution

$$B = A + 6$$

$$B - 4 = 2(A - 4)$$

$$A + 2 = 2A - 8$$

$$A = 10$$

$$B = 16$$

Final Answer

16 years

High-Yield Past-Paper-Style Mix**MCQ 96**

The sum of the present ages of a father and son is 50 years. Ten years ago, the father was 9 times as old as the son. Find the father's present age.

- A. 37 years B. 32 years
C. 42 years D. 47 years

Reported PPSC past-paper pattern (adapted).

Solution

$$F + S = 50$$

$$F - 10 = 9(S - 10)$$

$$F = 9S - 80$$

$$9S - 80 + S = 50$$

$$10S = 130$$

$$S = 13$$

$$F = 37$$

Final Answer

37 years

MCQ 97

The difference between the ages of two persons is 10 years. Fifteen years ago, the elder person was twice as old as the younger. Find the elder person's present age.

- A. 32 years B. 35 years
C. 38 years D. 41 years

Reported one-paper age pattern (adapted).

Solution

$$\begin{aligned} E &= Y + 10 \\ E - 15 &= 2(Y - 15) \\ Y - 5 &= 2Y - 30 \\ Y &= 25 \\ E &= 35 \end{aligned}$$

Final Answer

35 years

MCQ 98

The present ages of two friends are in the ratio 6 : 5 and their total age is 66 years. After how many years will their ages be in the ratio 8 : 7?

- A. 10 years B. 14 years
C. 12 years D. 16 years

Reported one-paper age pattern (adapted).

Solution

$$\begin{aligned} 6x + 5x &= 66 \\ 11x &= 66 \\ x &= 6 \\ \text{Present ages} &= 36, 30 \\ \frac{36+t}{30+t} &= \frac{8}{7} \\ 7(36+t) &= 8(30+t) \\ 252 + 7t &= 240 + 8t \\ t &= 12 \end{aligned}$$

Final Answer

12 years

MCQ 99

A father is now three times as old as his son. Five years ago, he was four times as old as his son. Find the son's present age.

- A. 13 years B. 17 years
C. 19 years D. 15 years

Reported one-paper age pattern (adapted).

Solution

$$\begin{aligned} F &= 3S \\ F - 5 &= 4(S - 5) \\ 3S - 5 &= 4S - 20 \\ S &= 15 \end{aligned}$$

Final Answer

15 years

MCQ 100

A father is 9 times as old as his son and a mother is 8 times as old as the son. If the sum of the parents' ages is 51 years, find the son's age.

- A. 3 years B. 1 years
C. 5 years D. 7 years

Reported PPSC past-paper pattern (adapted).

Solution

$$\begin{aligned} F &= 9S, \quad M = 8S \\ F + M &= 51 \\ 9S + 8S &= 51 \\ 17S &= 51 \\ S &= 3 \end{aligned}$$

Final Answer

3 years

AGE PROBLEMS | RAPID REVISION GRID

Core translations

$$\text{Present} = x$$

$$n \text{ years ago} = x - n$$

$$n \text{ years later} = x + n$$

Two-person total shift After n years:

$$(x + n) + (y + n) = x + y + 2n$$

Before n years:

$$(x - n) + (y - n) = x + y - 2n$$

Ratio shortcut For $a : b$: write ages as ax, bx . Do not invent two separate variables unless needed.

Average shortcut

$$\text{Total} = \bar{x} n$$

Replacement:

$$\text{New total} = \text{Old total} - \text{Leaving age} + \text{Joining age}$$

Birth interval pattern For m children born every d years:

$$x, x + d, x + 2d, \dots, x + (m - 1)d$$

One-paper check After solving, substitute the ages back into the original past/future ratio. A correct age solution must satisfy every stated condition and must keep all past ages non-negative.

Ratio + sum For ratio $a : b$ and total S :

$$x = \frac{S}{a + b}, \quad \text{ages} = ax, bx$$

Ratio + difference For ratio $a : b$ and difference D :

$$x = \frac{D}{|a - b|}$$

Difference check No matter how many years pass:

$$(x + n) - (y + n) = x - y$$

The age gap never changes.

Same-member average If nobody joins or leaves, after n years:

$$\bar{x}_{\text{new}} = \bar{x}_{\text{old}} + n$$